

Listing of Claims:

Claim 1 (Currently Amended): A screw set in a twin-screw extruder for mixing and dispersing a material to be kneaded into a kneaded product having a desired state of kneading, said screw set comprising:

a rotor segment comprising at least one kneading rotor, said kneading rotor having a plurality of kneading blades which provide a plurality of tips different from each other at least in the circumferential direction, said kneading rotor having a constant sectional shape in the axial direction, as viewed in a section transverse to the axial direction, except for crest portions of said kneading blades; and

a screw segment comprising at least one screw blade, said screw segment, except for crest portions of the screw blades thereof, having the same sectional shape as said at least one kneading rotor segment, as viewed in a section transverse to the axial direction, except for the crest portions of said kneading blades.

Claim 2 (Previously presented): The screw set in a twin-screw extruder according to Claim 1, each said screw set further comprising:

a kneading disk segment comprising at least one kneading disk, said kneading disk segment, except for crest portions of disk blades thereof, having the same sectional shape as said rotor segment, except for the crest portions of said kneading blades.

Claim 3 (Previously presented): The screw set in a twin-screw extruder according to Claim 2, wherein all of said kneading disks have the same sectional shape as said rotor segment, except for the crest portions of said kneading blades.

Claim 4 (Cancelled).

Claim 5 (Previously presented): The screw set in a twin-screw extruder according to Claim 1, wherein said rotor segment comprises at least one of three types including a first type in which said kneading blades are twisted clockwise with respect to the axial direction, a second type in which said kneading blades are extended parallel to the axial direction, and a third type in which said kneading blades are twisted counterclockwise with respect to the axial direction.

Claim 6 (Previously presented): The screw set in a twin-screw extruder according to Claim 5, wherein said rotor segment comprises at least two of said three types.

Claim 7 (Previously presented): The screw set in a twin-screw extruder according to Claim 6, wherein said rotor segment comprises all of said three types.

Claim 8 (Previously presented): The screw set in a twin-screw extruder according to claim 1, wherein the number of said kneading blades is two.

Claim 9 (Previously presented): The screw set in a twin-screw extruder according to Claim 1, wherein the number of said kneading blades is three.

Claim 10 (Currently Amended): A twin-screw extruder for mixing and dispersing a material to be kneaded into a kneaded product having a desired state of kneading, said extruder comprising:

a barrel having two intercommunicating chambers; and

a screw set rotatably mounted in each of said chambers so as to mesh with one another, each of said screw sets comprising:

a rotor segment comprising at least one kneading rotor, said kneading rotor having a plurality of kneading blades which provide a plurality of tip clearances different from each other at least in the circumferential direction, said kneading rotor having a constant sectional shape in the axial direction, as viewed in a section transverse to the axial direction, except for crest portions of said kneading blades; and

a screw segment comprising at least one screw blade, said screw segment, except for crest portions of the screw blades thereof, having the same sectional shape as said at least one kneading rotor segment, as viewed in a section transverse to the axial direction, except for the crest portions of said kneading blades.

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Claim 11 (Previously presented): The screw set in a twin-screw extruder according to claim 10, wherein said rotor segment provides a plurality of tip clearances different from each other in the axial direction of said rotor segment.